

Amendments to the Claims:

Please amend the claims as follows.

1. (currently amended) For use in a communications system, a system for extending the range of a wireless headset used by a user to conduct voice conversations, said system comprising:

a phone operable to communicate wirelessly at least pursuant to a first wireless communications protocol that has a distance limit;

a wireless headset mated with said phone and also operable to communicate pursuant to the first wireless communications protocol, said wireless headset for communicating directly with said phone utilizing a wireless communications protocol having a distance limit when positioned within the distance limit;

a communications network backbone; and

a plurality of access points each coupled to said communications network backbone at one of a plurality of dispersed locations and in communication connectivity therebetween pursuant to a second communications protocol by way of said communications network backbone, an access point of said plurality emulating said phone with said wireless headset and for communicating therewith pursuant to the first wireless communications protocol when said wireless headset is beyond said phone by more than the distance limit and an access point of said plurality emulating said wireless headset with said phone and for communicating therewith pursuant to the first communications protocol when said wireless headset is beyond said phone by more than the distance limit.

2. (previously presented) The system of claim 1 wherein each access point of said plurality is capable of selectively:

emulating said phone utilizing said first wireless communications protocol,

emulating said headset utilizing said first wireless communications protocol,

communicating with said phone within said distance limit from said phone utilizing said first wireless communications protocol,

communicating with said headset within said distance limit from said headset utilizing said first wireless communication protocol, and

interfacing with said communications system.

3. (previously presented) The system of claim 2 wherein said phone and said headset communicate utilizing Bluetooth and said access points are each capable of emulating said phone and said headset utilizing Bluetooth.

4. (previously presented) The system of claim 1 wherein said phone and said headset are separated by a distance greater than said distance limit, but said phone is separated from a first access point by a distance not greater than said distance limit and said headset is separated from a second access point by a distance not greater than said distance limit.

5. (previously presented) The system of claim 4 wherein said first access point emulates said headset in communicating with said phone and said second access point emulates said phone in communicating with said headset.

6. (currently amended) The system of claim 5 wherein said communication connectivity pursuant to the second communications protocol within said communications network backbone couples said first and second access points.

7. (previously presented) The system of claim 6 wherein communications from said phone received at said first access point are forwarded via said communication connectivity to said second access point for transmission to said headset and communications from said headset received at said second access point are forwarded via said communication connectivity to said first access point for transmission to said phone.

8. (previously presented) The system of claim 4 wherein said distance limit is a Bluetooth wireless headset distance limit.

9. (previously presented) The system of claim 1 wherein said phone said headset communicate directly when said phone and said headset are separated by a distance greater than the distance limit and communications via said communication connectivity between two access points when said phone and said headset are separated by a distance greater than said distance limit.

10. (previously presented) The system of claim 1 wherein said access points are capable of detecting when said phone and said headset are separated by a distance greater than said distance limit or whether said phone and said headset are communicating directly.

11. (currently amended) For use in a communications system, a method for extending the range of a wireless headset used by a user to conduct voice conversations, said method comprising the operations of:

associating a wireless headset with a phone, said wireless headset and a said phone operable to communicate wirelessly at least pursuant to a first wireless communication protocol that has a distance limit and said wireless handset capable of communicating directly with said phone utilizing the first wireless communications protocol having the distance limit when the wireless headset is positioned within range, defined by the distance limit of said distance limit; and

coupling each of a plurality of access points to a communications network backbone at one of a plurality of dispersed locations and in communication connectivity therebetween pursuant to a second communications protocol by way of said communications network backbone, an access point of said plurality emulating said phone with said wireless headset and for communicating therewith utilizing the first wireless communications protocol when said wireless headset is beyond said phone by more than the distance limit, and an access point of said plurality emulating said wireless headset with said phone and for communicating therewith utilizing the first wireless communications protocol when said wireless headset is beyond said phone by more than the distance limit.

12. (previously presented) The method of claim 11 further comprising the operations of enabling each access point to selectively:

emulate said phone utilizing said first wireless communications protocol,

emulate said headset utilizing said first wireless communications protocol,

communicate with said phone within said distance limit from said phone utilizing said first wireless communications protocol,

communicate with said headset within said distance limit from said headset utilizing said first wireless communications protocol, and

interface with said communications network backbone.

13. (previously presented) The method of claim 12 further comprising the operations of: utilizing Bluetooth for communications between said phone and said headset; and enabling each said access point to emulate said phone and said headset utilizing Bluetooth.

14. (previously presented) The method of claim 11 further comprising the operation of:

separating said phone and said headset by a distance greater than said distance limit without separating said phone from a first access point or said headset from a second access point by a distance greater than said distance limit.

15. (previously presented) The method of 14 further comprising the operations of:
emulating said headset in communicating with said phone utilizing said first access point; and
emulating said phone in communicating with said headset utilizing said second access point.

16. (currently amended) The method of claim 15 further comprising the operation of:
coupling said first and second access points by said communication connectivity pursuant to the second communications protocol within said communications network backbone.

17. (currently amended) The method of claim 16 further comprising the operation of:
forwarding communications from said phone received at said first access point via said communication connectivity to said second access point for transmission to said headset; and
forwarding communications from said headset received at said second access point via said communication connectivity pursuant to the second communications protocol to said first access point for transmission to said phone.

18. (previously presented) The method of claim 14 wherein said operation of separating said phone and said headset by a distance greater than said distance limit without separating said phone from a first access point or said headset from a second access point by a distance greater than said distance limit further comprises:

separating said phone and said headset by a distance greater than a Bluetooth wireless headset distance limit.

19. (currently amended) The method of claim 11 further comprising:
enabling said phone and said headset to communicate directly when said phone and said headset are separated by a distance not greater than the distance limit and to communicate via said communications path pursuant to the second communications protocol between two access points when said phone and said headset are separated by a distance greater than said distance limit.

20. (previously presented) The method of claim 11 further comprising:

enabling said access points to detect when said phone and said headset are separated by a distance greater than said distance limit or whatever said phone and said headset are communicating directly.

21. (new) A computer program product, for use in a communication system with at least a first access point, for extending the range of a wireless headset used by a user to conduct voice conversations with a mobile station, the computer program product comprising a computer-readable storage medium having computer-readable instructions embodied therein, the computer-readable instructions comprising:

first computer-readable instructions capable of providing wireless communications between the first access point and the headset pursuant to a first wireless communications protocol that has a distance limit, wherein the first computer-readable instructions are further capable of emulating the mobile station for existing wireless communications between the headset and the mobile station;

second computer-readable instructions capable of providing wireless communications between the first access point and the mobile station pursuant to the first wireless communications protocol, wherein the second computer-readable instructions are further capable of emulating the headset for the existing wireless communications between the headset and the mobile station; and

third computer-readable instructions capable of communicating pursuant to a second communication protocol to transmit the voice conversations of the headset and the mobile station between the first computer-readable instructions and the second computer-readable instructions.

22. (new) The computer program product of claim 21 wherein the first communications protocol utilizes Bluetooth such that the headset and the mobile station communicate utilizing Bluetooth and the first access point emulates the headset and the mobile station utilizing Bluetooth.

23. (new) The computer program product of claim 21 wherein the first, second, and third computer-readable instructions are adapted for extending the range of the headset used to conduct voice conversations with the mobile station when the headset is separated from the mobile station by a distance greater than the distance limit, but the headset and the mobile station are separated from the first access point by a distance not greater than the distance limit.

24. (new) A computer program product, for use in a communication system with at least a first access point and a second access point, each coupled to a communications backbone at dispersed locations and in communication connectivity therebetween pursuant to a second communications protocol by way of the communications network backbone, for extending the range of a wireless headset used by a

user to conduct voice conversations with a mobile station, the computer program product comprising a computer-readable storage medium having computer-readable instructions embodied therein, the computer-readable instructions comprising:

first computer-readable instructions adapted to provide wireless communications between the first access point and the headset pursuant to a first wireless communications protocol that has a distance limit, wherein the first computer-readable instructions are further adapted to emulate the mobile station for existing wireless communications between the headset and the mobile station; and

second computer-readable instructions adapted to communicate pursuant to the second communication protocol to transmit the voice conversations of the headset between the first access point and the second access point.

25. (new) The computer program product of claim 24 wherein the first communications protocol utilizes Bluetooth such that the headset and the mobile station communicate utilizing Bluetooth and the first access point emulates the mobile station utilizing Bluetooth.

26. (new) The computer program product of claim 24 wherein the first and second computer-readable instructions are adapted for extending the range of the headset used to conduct voice conversations with the mobile station when the headset is separated from the mobile station by a distance greater than the distance limit, but the headset is separated from the first access point by a distance not greater than the distance limit, and the mobile station is separated from the second access point by a distance not greater than the distance limit.

27. (new) The computer program product of claim 24 wherein the headset is a first headset and the mobile station is a first mobile station, and the computer program product further comprises third computer-readable instructions adapted to provide wireless communications between the first access point and at least one of the first mobile station and a second mobile station pursuant to the first wireless communications protocol, wherein the third computer-readable instructions are further adapted to emulate at least one of (i) the first headset for the existing wireless communications between the first headset and the first mobile station and (ii) the second headset for existing wireless communications between the second headset and the second mobile station.

28. (new) A computer program product, for use in a communication system with at least a first access point and a second access point each coupled to a communications backbone at dispersed locations and in communication connectivity therebetween pursuant to a second communications protocol

by way of the communications network backbone, for extending the range of a wireless headset used by a user to conduct voice conversations with a mobile station, the computer program product comprising a computer-readable storage medium having computer-readable instructions embodied therein, the computer-readable instructions comprising:

first computer-readable instructions adapted to provide wireless communications between the second access point and the mobile station pursuant to a first wireless communications protocol that has a distance limit, wherein the first computer-readable instructions are further adapted to emulate the headset for existing wireless communications between the headset and the mobile station; and

second computer-readable instructions adapted to communicate pursuant to a second communication protocol to transmit the voice conversations of the mobile station with the first access point.

29. (new) The computer program product of claim 28 wherein the first communications protocol utilizes Bluetooth such that the headset and the mobile station communicate utilizing Bluetooth and the second access point emulates the headset utilizing Bluetooth.

30. (new) The computer program product of claim 28 wherein the first and second computer-readable instructions are further adapted for extending the range of the headset used to conduct voice conversations with the mobile station when the headset is separated from the mobile station by a distance greater than the distance limit, but the headset is separated from the first access point by a distance not greater than the distance limit, and the mobile station is separated from the second access point by a distance not greater than the distance limit.

31. (new) The computer program product of claim 28 wherein the headset is a first headset and the mobile station is a first mobile station, and the computer program product further comprises third computer-readable instructions adapted to provide wireless communications between the first access point and at least one of the first headset and a second headset pursuant to the first wireless communications protocol, wherein the third computer-readable instructions are further adapted to emulate at least one of (i) the first mobile station for the existing wireless communications between the first headset and the first mobile station and (ii) the second mobile station for existing wireless communications between the second headset and the second mobile station.